MODEL-BASED LOCALIZATION AND MEASUREMENT OF MINIATURE SURFACE MOUNT COMPONENTS

ABSTRACT

5   A system and method for object inspection includes an object modeler; an iterative object segmentor in signal communication with the object modeler for receiving an input image and model parameters and producing a segmented image; a moment transformer in signal communication with the iterative object segmentor for receiving an input image, model parameters and

10   a segmented image and producing estimates of object translation, rotation and scaling; an edge detector and interpolator in signal communication with the moment transformer for receiving an input image, model parameters and estimates and producing a set of line edges; and an iterative optimizer in signal communication with the edge detector and interpolator for receiving an

15   input image, model parameters, estimates and line edges and producing refined estimates of object translation, rotation and scaling.